



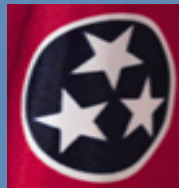
TENNESSEE

Emergency Management Plan (TEMP) Catastrophic Event Annex (CAT)

United States Army Corps of Engineers,
Workshop
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NEW MADRID
SEISMIC ZONE





Tennessee Emergency Management Plan (TEMP)

Catastrophic Annex *Overview of CAT PLAN*

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TENNESSEE CATASTROPHIC EVENT ANNEX

Based on the New Madrid Seismic Zone
Catastrophic Earthquake Phase II Design Scenario



TN 100-24

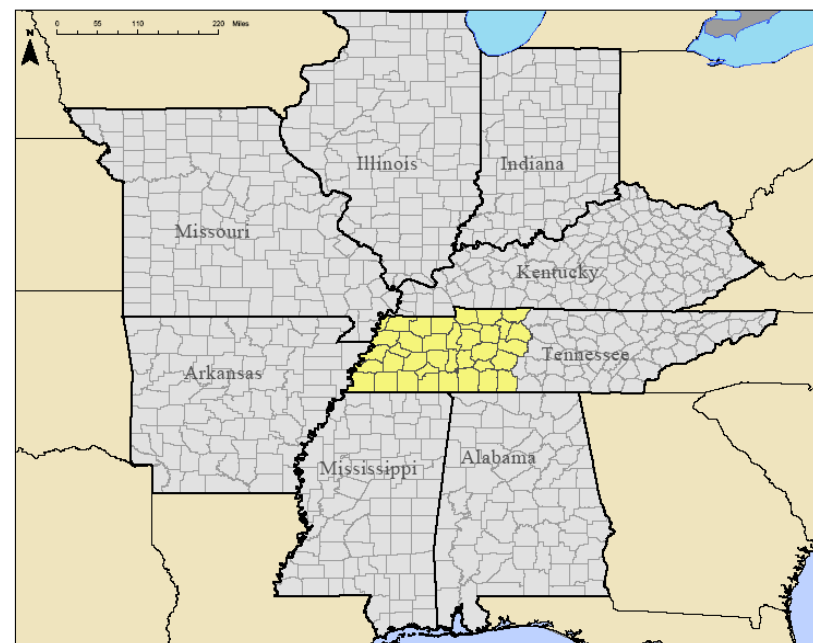
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Revised September 1, 2010

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Tennessee NMSZ Threat

- A NMSZ event could impact 50% of the State's population
- 2,757,823 people reside in the 37 critical counties
- CUSEC – Eight NMSZ states make up CUSEC



NMSZ Threat Estimates for Tennessee



- 2,180 deaths and 36,575 injuries
- 115,589 structures destroyed
- 88,189 structures with major damage
- 900 damaged bridges with 330 collapses occurring along the western border of Tennessee
- 256 fire stations with moderate damage
- 48 hospitals moderately damaged
- 404 schools collapsed and rendered unusable for evacuee shelter use.



Goal - Answer the ? – “What will the state do if?”

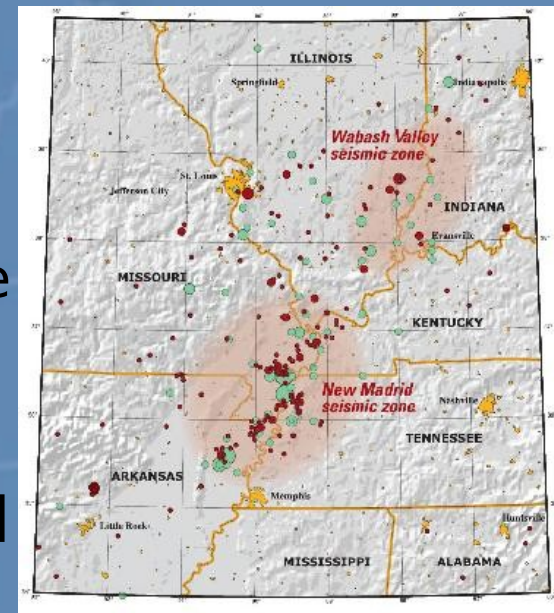


- What will the State of Tennessee do if an earthquake should impact the western portion of the state tomorrow?



The Process

- Capabilities Based Planning
 - What resources do we have?
- Threat Based Planning
 - Structured process and procedures based on the available capabilities and the known threat.
- Defines response needs.
- Development of automatic and pre-deployment strategies.



The Process

- The scenario helped drive execution of the planning process and to evaluate plans already in place.
- Collect input.
- Define response and recovery operations.





The Process

- 409 people participated in the state's two regional planning workshops. Participants included: Representatives from all West TN County Emergency Management Agencies (20 Counties). Many County Sheriff's, County Fire Chief's, Emergency Medical Directors and State Dept.'s and Agencies.
- Working breakout sessions were held for all 16 emergency support functions.
- Breakout inputs were captured and used to help structure the revised plan.
- Plan has gone through four major drafts with technical review provided by TEMA staff.
- A final draft of the Plan was presented to 200 participants at the Annual Emergency Management of TN state workshop for review and distribution in October, 2008.
- The TEMP and the CAT have been used in both actual response operations (Nashville Floods as an example) and for multiple catastrophic exercise activities including NLE 2011, TNCAT 2012 and 2013.
- Tested and Proven





The Result

- Local participation helped shape the plan.
- Responders have an automatic course of direction from the onset of the event.
- Life-sustaining supplies are delivered faster to the people who need them.
- Infrastructure and community recovery can begin faster.



Emergency Management Plan Preliminary Considerations



TEMP:

- a) Assist local jurisdictions.
- b) Assist in organizing response to certain emergencies.
- c) Work with federal assets as needed.





Concepts of Operations

- Explains the jurisdictions overall approach.
- States the division of responsibilities.
- Mandates activation of EMP (or EOP).
- Describes action levels and implications.
- Provides a general sequence of action : before, during and after an emergency.
- Names who requests aid and under what conditions (Keep the sample forms in EMP)





TEMA Support Functions

- ESF-1- Transportation
- ESF-2- Communication
- ESF-3- Infrastructure
- ESF-4- Firefighting
- ESF-5- Information Mgmt
- ESF-6- Mass Care
- ESF-7- Resource Mgmt
- ESF-8- Medical
- ESF-9- Search & Rescue
- ESF-10- Environment Response
- ESF-11-Food
- ESF-12-Energy
- ESF-13- Law enforcement
- ESF-14- Volunteers & Donations
- ESF-15- Recovery
- ESF-16 Animal Care





TENNESSEE CATASTROPHIC EVENT ANNEX

Based on the New Madrid Seismic Zone
Catastrophic Earthquake Design Scenario



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October 1, 2008

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Major Plan Components

- Historical overview & background
- Managing response expectations
- Plan development assumptions
- Planning/operations assumptions by each ESF.
- Situation
- Concept of operations
- Disaster Information
- Direction, Control and Coordination
- Logistics
- Planning/Operations
- Primary Response Actions
- Estimated Resources Requests
- Time Sequenced Operational Priorities
 - (Automatic Triggers)
- Supporting Appendices



Plan Highlights

Managing Response Expectations



- A catastrophic event on the NMSZ will severely overload the response capability of the various local and state governments
- Local and state governments cannot meet every mission need at every mission location upon immediate notice.



Plan Highlights

Managing Response Expectations



- Helps the public, their elected officials, emergency managers and public safety officials understand how a catastrophic response may occur incrementally over time.





Plan Highlights *Situation*

- Based on HAZUS, CUSEC, CERI Scenario and MAE Center data.
 - Liquefaction
 - Highway system
 - Communication infrastructure
 - Power
 - Fires
 - Medical facilities and schools
 - Loss estimates

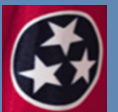


Plan Highlights

Concept of Operations



- Mission/strategic intent
 - Mobilize and provide all necessary state resources to the affected counties in an expeditious and organized manner.
 - “Automatically activating” lifesaving and life-sustaining resources until sufficient situational awareness is obtained.
- ***Saving and sustaining lives***
- ***Protecting/preserving public health & safety***
- ***Restoring critical infrastructure & public services***
- ***Mitigating future property damage***



Plan Highlights

Automatic Activation Triggers



- ***Based on levels found in the Tennessee emergency management plan***
- Earthquakes affecting Tennessee with a magnitude of 4.0–4.9 and that have reported damage will activate level 3 of the TEMP.
- The SEOC will be activated (partially or fully with reported damage) for earthquakes having a magnitude of 5.0–5.9, and at the TEMA director's or a designee's discretion. By State Code Annotated when the SEOC is activated, Tennessee is immediately in an official State of Emergency.
- A full SEOC activation trigger point for an earthquake in Tennessee is established for a magnitude 6.0 or greater (alert level 5).



Plan Highlights *Time Sequenced Operational Priorities*



Target Tim 0-4 Hours	Tennessee Automatic Activation and Response Procedures		
Objective	Begin Alert and Notifications.	Lead for this Objective	
			TEMA Operations
Task 1	Begin mandatory notification process to TEMA Director and applicable TEMA executive staff.	<i>One Time Continuing</i>	Task Lead
			TEMA Operations
Task 2	Notify the Governor and Adjutant General and formalize formal disaster declaration.	<i>One Time Continuing</i>	Task Lead
			TEMA Director
Task 3	A declared State of Emergency for the State is automatic when the SEOC is activated at level 1.	<i>One Time Continuing</i>	Task Lead
			TEMA Director



Plan Highlights *Time Sequenced Operational Priorities*



1. 43 primary response objectives and 350 supporting tasks
2. Identified in a “Target Time” over a 30 day period.
 1. The “**Target Time**” is designed to provide a logical progression for organizing the response.





Plan Highlights

Phases of the Operation

- ***Catastrophic reconnaissance and situational awareness***
- ***Catastrophic activation-deployment-employment***
- ***Catastrophic incident response***
- ***Transition back to local authorities***





Plan Highlights

Phases of the Operation

- ***Catastrophic reconnaissance and situational awareness***
 - Refers to the direct observation or the condition that may or may not exist after the event.
 - Fly Emergency Service
 - Routes (ESR's)
 - Use DOD Satellite Imagery
 - Condition of Staging Areas
 - Condition of airports
 - Major Fires
 - Environmental Problems





Plan Highlights

Phases of the Operation

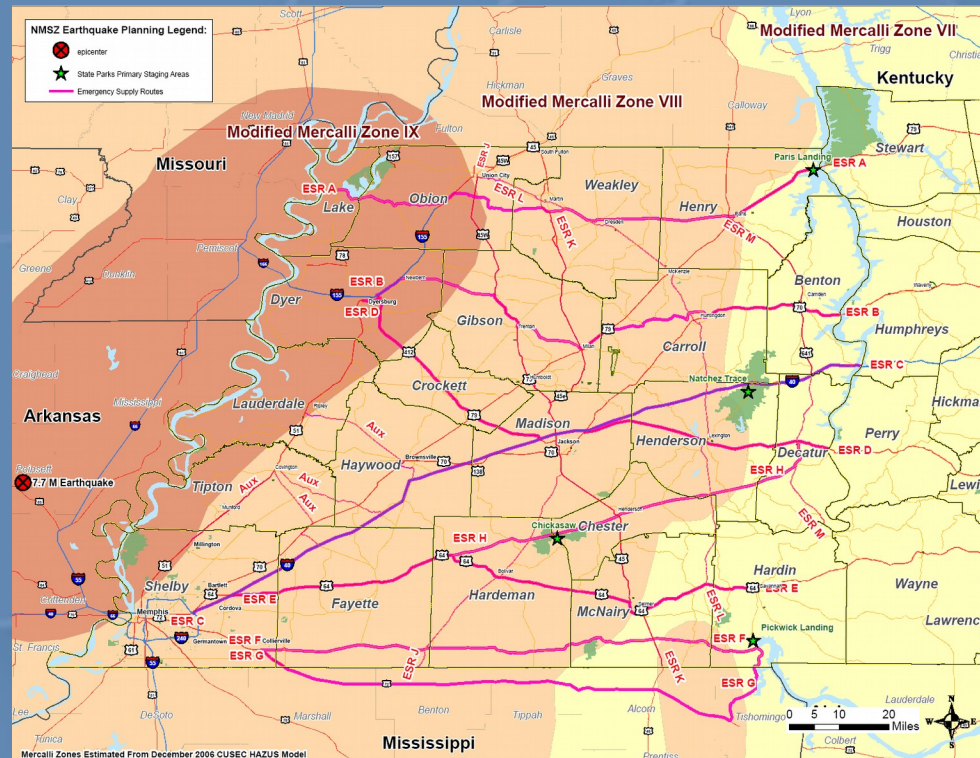
- ***Catastrophic reconnaissance and situational awareness***
 - Catastrophic Reconnaissance and Information Gathering is supported in the plan by a detailed Appendix with checklists.



Plan Highlights

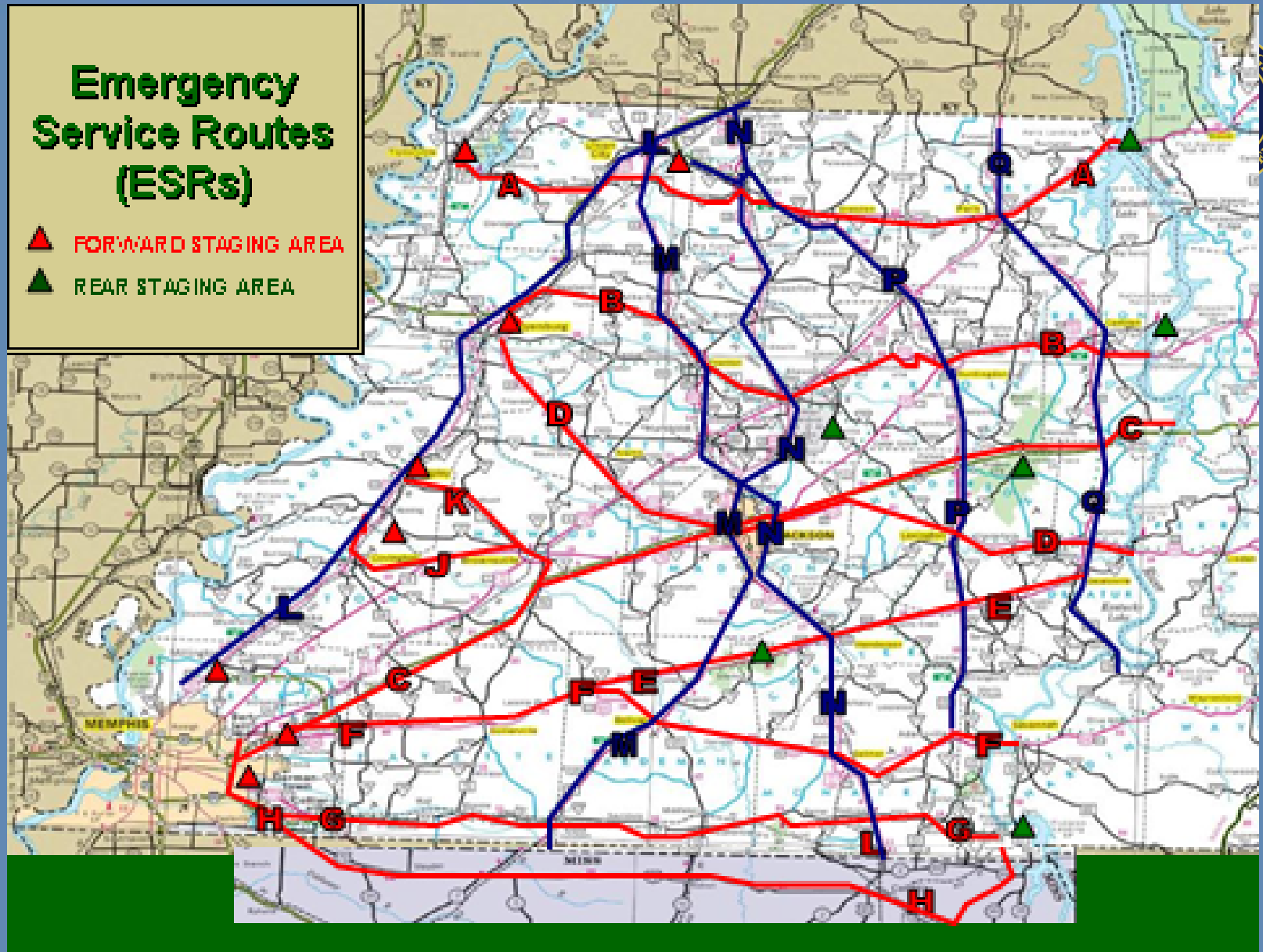
Phases of the Operation

- ***Catastrophic reconnaissance and situational awareness***



Emergency Service Routes (ESRs)

- ▲ FORWARD STAGING AREA
- ▲ REAR STAGING AREA



Plan Highlights

Phases of the Operation



- **Catastrophic Activation-Deployment-Employment**

- Full activation of the TEMP and the Catastrophic Event Annex
- Activation of the SEOC to Level 1
- "Automatic Activation of state assets by all state agencies
- Maximum use of pre-scripted mission assignments and pre-positioned disaster supplies
- Commitment of all personnel and resources



Plan Highlights

Phases of the Operation



- **Catastrophic Incident Response Doctrine**
 - *It is not necessary that each level of government become so overwhelmed, or be allowed to fail, prior to surging resource from the next appropriate level.*



Plan Highlights

Phases of the Operation



- ***Transition to local authorities***
 - All transition processes have one common feature: **local ownership of the transition process. Local ownership and a willingness to provide leadership is the key for sustainable recovery and development.**

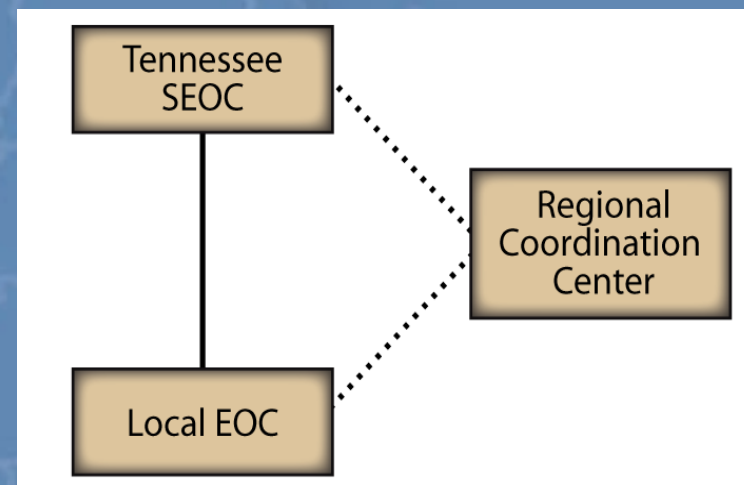




Plan Highlights

Direction and Control

- Local Field Response level
- Unified Command at the local Field Level
- Local EOC and expansion of ICS at the Field Level
- Expansion of the Command/Management function through the local EOC and coordination with the regional RCC

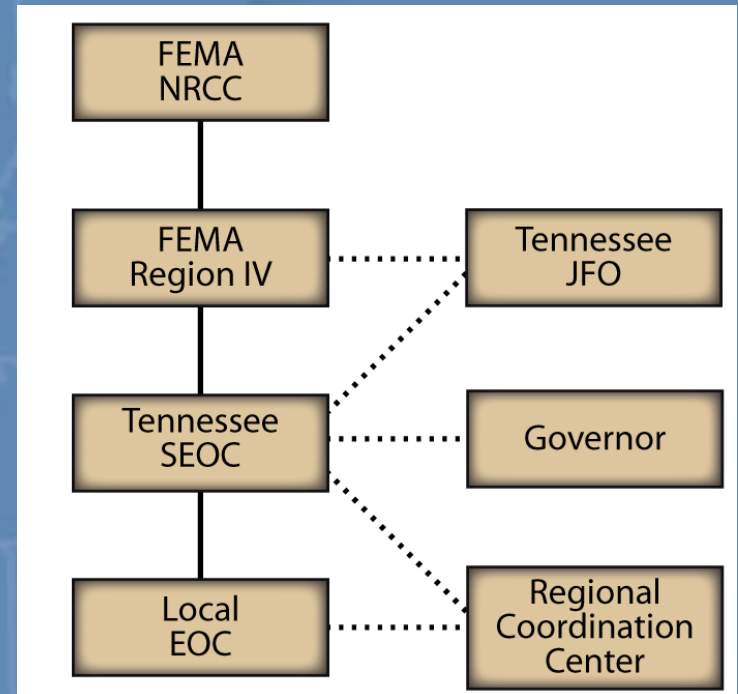


Plan Highlights

Direction and Control



- Direction and control at the Local response level
- General State coordination with the Federal Government
- Direction and control of federal assets at the Federal response level.



Plan Highlights

Primary Response Actions and Estimated Order Requests



- Based on lessons learned from TNCAT 2007, Vigilant Guard 08, NLE 11, TNCAT 12 and 13 and RAW I, II and III.
- Input from state and local planning workshops headed by local county responders working with State agency partners.
- Lessons learned from past major earthquakes and 25 years of State and Local EQ plans dating from 1982, 1991, 1997, 2005.
- Organized by ESF.
 - Provides a “roadmap” for each ESF
 - Provides flexibility to meet vital objectives and tasks
 - Resource estimates based on “*worst case scenario*”



Plan Highlights *Estimated*

Order Request ESF 13 - Example of *Resource needs*



Resource	Description	Quantity of Resources Needed
ESF 13 Manager	ESC	2
Local Agency Liaison	Local Agency ESC	1
Law Enforcement Officers	Support Critical Intersections on ESR	840
Law Enforcement Officers	ESR Patrol	62
Law Enforcement Officers	Building and Facility Security	1,550
Law Enforcement Officers	For Strike Teams	13,278
Law Enforcement Supervisors	For Strike Teams, 1 to 5 and 1 to 7 ratio	3,134
Law Enforcement Vehicles	1 per 2 on-duty officers 1 per 2 on-duty supervisors	4,717
TN National Guard	Army National Guard	Based on need



Plan Highlights *Supporting Appendices*



- Scenario and loss estimates
- Personnel deployment guidelines
- Catastrophic reconnaissance and information gathering
- Aircraft use and capability
- Working with the military





On Going - Efforts

- Essential Elements of Information or EEI's to be used to support the emergency management decision making process

Earthquake

Status of public utilities (Electric Power Grid, Public Water)

Status of transportation infrastructure (navigable water ways, highways, rail)

Status of air transportation hubs

Status of logistics support centers (staging areas, POD, LSA,)

Status of public support centers (shelters, evacuation orders, hospitals, etc)

Status of injuries and fatalities

Status of communications systems

Status of fuel and energy resources (diesel, gas, natural gas) distribution

Status of private sector Infrastructure

Status of Local Government

Per the CAT (auto - triggers page 153)

Ascertain disaster boundaries

Ascertain secondary disaster boundaries (Flood, Fire etc)

Asses initial and long term needs

Determine status of local disaster declaration (status of local govt)

Gather historical data

What pre-approved mitigation projects are impacted

Determine state congressional districts affected

Determine what news is being reported

Determine status of transportation systems

Determine access points to disaster areas

Determine status of communications systems





Questions



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